

2623

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: William M. Silver et al.
Title: Method for Fast, Robust, Multi-Dimensional Pattern Recognition

Docket No.: C98-035
Filed: July 13, 1998
Examiner: Chang, Jon Carlton

Serial No.: 09/114,335
Due Date: N/A
Group Art Unit: 2623

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- ☒ A return postcard and this transmittal document.
- ☒ An Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (2 pgs.), and copies of 17 cited documents.

If not provided for in a separate paper filed herewith,

COGNEX CORPORATION
Customer Number: 23459

By

Arthur J. O'Dea
Reg. No. 42952
AJO:CMG:cs

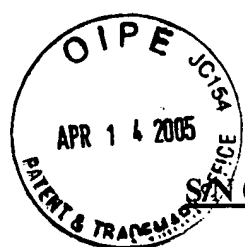
CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 12th day of April, 2005.

Name

Cheryl Sloane

Signature

(GENERAL)



SN 09/114,335

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	William M. Silver et al.	Examiner:	Chang, Jon Carlton
Serial No.:	09/114,335	Group Art Unit:	2623
Filed:	07/13/1998	Docket:	C98-035
Title:	Method for Fast, Robust, Multi-Dimensional Pattern Recognition		

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

The Information Disclosure Statement filed herewith is a resubmission of non-patent documents cited in an Information Disclosures Statement originally filed on November 25, 1998. Applicants are resubmitting these references in response to the Examiner's assertion that copies of these documents are missing.

Accordingly, the Applicants believe that the filing of this Information Disclosure Statement should be considered to filed **after** three months of the filing date of this application, but **before** the mailing date of the first Office Action on the merits.

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

INFORMATION DISCLOSURE STATEMENT

Serial No :09/114,335

Filing Date: No

Title: Method for Fast, Robust, Multi-Dimensional Pattern Recognition

Page 2
Dkt: C98-035


Respectfully submitted,

WILLIAM M. SILVER ET AL.

By their Representatives,

Cognex Corporation
One Vision Drive
508-650-3108

Date April 12, 2005

By 
Arthur J. O'Dea
Reg. No. 42952

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Name

4/12/05

Signature





Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	09/114,335
				Filing Date	07/13/98
				First Named Inventor	Silver
				Group Art Unit	2623
				Examiner Name	Chang, Jon Carlton
Sheet	1	of	2	Attorney Docket Number	C98-035

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Name of the Author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
		BALLARD, D.H., "Generalizing the Hough Transform to Detect Arbitrary Shapes," <i>Pattern Recognition</i> , 1981, pp. 111-122, Vol. 13, No. 2, Pergamon Press Ltd., UK		
		BALLARD, et al., "Section 4.2 Searching Near and Approximate Location," and "Section 4.3 The Hough Method for Curve Detection," <i>Computer Vision</i> , 1982, pp. 121-131, Prentice-Hall, Inc., Englewood Cliffs, NJ, USA		
		BROWN, LISA GOTTESFELD, "A Survey of Image Registration Techniques," <i>ACM Computing Surveys</i> , December 1992, pp. 325-376, Vol. 24, No. 4, Association for Computing Machinery, USA		
		CAELLI, et al., "Fast Edge-Only Matching Techniques for Robot Pattern Recognition," <i>Computer Vision, Graphics, and Image Processing</i> 39, 1987, pp. 131-143, Academic Press, Inc.		
		CAELLI, et al., "On the Minimum Number of Templates Required for Shift, Rotation and Size Invariant Pattern Recognition," <i>Pattern Recognition</i> , 1988, pp. 205-216, Vol. 21, No. 3, Pergamon Press plc.		
		COGNEX CORPORATION, "Chapter 2 Searching," <i>Cognex 2000/3000/4000 Vision Tools</i> , 1992, pp. 2-1 to 2-62, Revision 5.2 P/N 590-0103, Natick, MA, USA		
		COGNEX CORPORATION, "Chapter 1 Searching," <i>Cognex 3000/4000/5000 Programmable Vision Engines, Vision Tools</i> , 1996, pp. 1-68, Revision 7.4 590-1036, Natick, MA, USA		
		COGNEX CORPORATION, "Chapter 14 Golden Template Comparison," <i>Cognex 3000/4000/5000 Programmable Vision Engines, Vision Tools</i> , 1996, pp. 569-595, Revision 7.4 590-1036, Natick, MA, USA		
		COGNEX CORPORATION, "Apex Search Object Library Functions," Natick, MA, USA, 1998 but public before the above-referenced filing date.		
		COGNEX CORPORATION, "Apex Search Object," <i>acuWin version 1.5</i> , March 31, 1997, pp. 1-35, Natick, MA, USA		
		COGNEX CORPORATION, "Apex Model Object," <i>acuWin version 1.5</i> , March 31, 1997, pp. 1-17, Natick, MA, USA		
		COGNEX CORPORATION, "Description of Sobel Search," Natick, MA, USA, 1998 but public before the above-referenced filing date.		

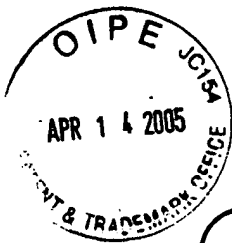
Examiner Signature		Date Considered	
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¹Unique citation designation number. ²Applicant is to place a check mark here if English translation is attached.

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	09/114,335
				Filing Date	07/13/98
				First Named Inventor	Silver
				Group Art Unit	2623
				Examiner Name	Chang, Jon Carlton
Sheet	2	of	2	Attorney Docket Number	C98-035

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Name of the Author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		CROUZIL, et al., "A New Correlation Criterion Based on Gradient Fields Similarity," <i>Proceedings of the 13th International Conference on Pattern Recognition Volume I Track A: Computer Vision</i> , August 25-29, 1996, pp. 632-636, IEEE Computer Society Press, Los Alamitos, CA, USA	
		GRIMSON et al., "On the Sensitivity of the Hough Transform for Object Recognition," <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , March 1990, pp. 255-274, Vol. 12, No. 3	
		HSIEH et al., "Image Registration Using a New Edge-Based Approach," <i>Computer Vision and Image Understanding</i> , August 1997, pp. 112-130, Vol. 67, No. 2, Academic Press	
		ROSENFELD et al., "Coarse-Fine Template Matching," <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , February 1997, pp. 104-107, USA	
		TIAN et al., "Algorithms for Subpixel Registration," <i>Computer Vision, Graphics, and Image Processing</i> 35, 1986, pp. 220-233, Academic Press, Inc.	

Examiner Signature		Date Considered	
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